Combination Taper Jig and Straight Edge

With this jig you can cut tapers or true one edge of a bowed board. The 36" length and 8" width for the base is what I used for cutting legs for a project but any length or width of base can be made to fit the job. Extra clamp strips should be added to longer bases for cutting straight edges.

Parts List

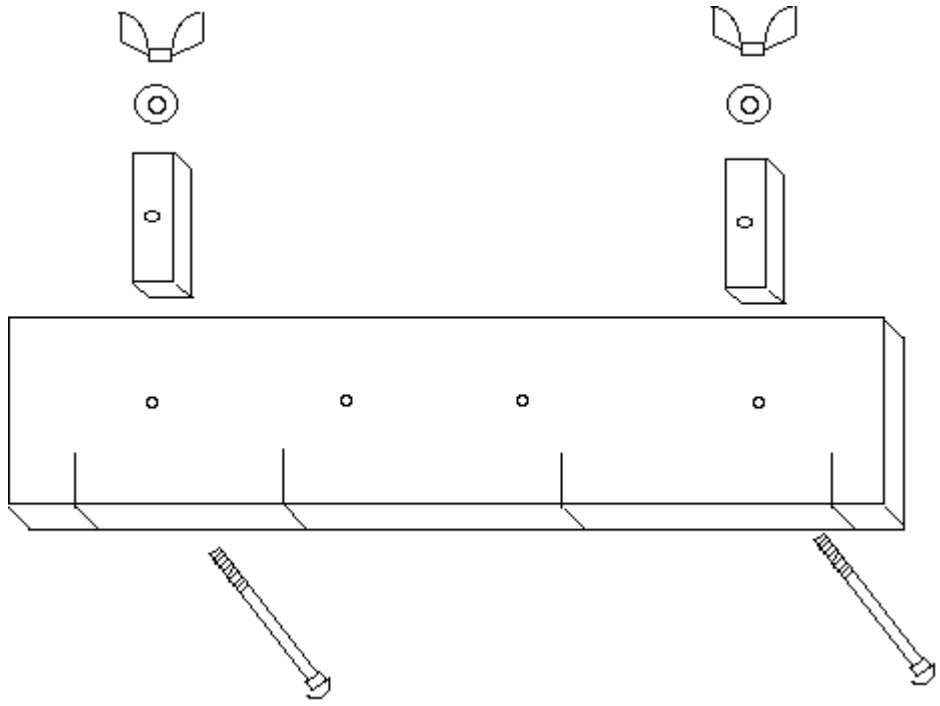
3/4" thick plywood or particle board 36" X 8"

3/4" X 1 1/2" X 7" hardwood 2 pieces

5/16" X 4" long carriage bolts 2 ea.

5/16 flat washers 2 ea.

5/16" wing nuts 2 ea.



Assembly

Cut a piece of 3/4" thick plywood or particle board 36" long and aprox. 8" wide using one factory edge to make sure it is straight for the jig base..

Using a 3/4" spade bit drill four holes at 6", 14", 24" and 30" from the left end in the center of the back of the jig base about 3/16" deep for the carriage bolt heads. Drill the holes through the board with a 5/16" bit at each of these points.

Cut two strips of 1X2 about 1/2" shorter than the width of the jig base for clamp strips, drill a 3/16" hole in the center of them.

Mark the top of the board starting 2" from the right end at 12", 24" and 32".

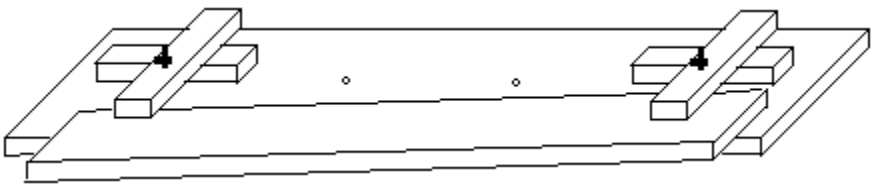
Push 4" long 5/16" carriage bolts through the two appropriate holes in the base, install 1X2 strips, washer and wingnut.

To use as taper jig

Set fence on saw the width of jig base. To cut a 32" long piece with a taper lay the material on the base with the ends lined up with the first and last marks, using the first and last holes for the clamp strips place scrap material the thickness of the material being cut under the other ends. With a ruler set the distance the material is on the base at each end, tighten the wing nuts, check measurements and run throught the saw.

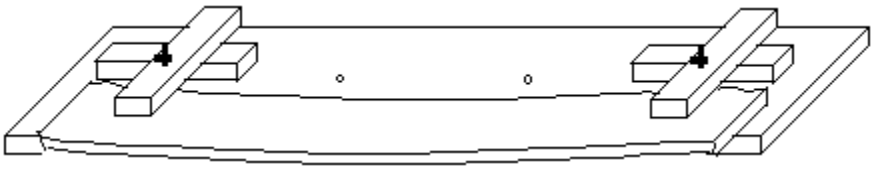
For shorter pieces use the other holes and marks on the base.

For some widths the finished piece may have to overhang the base rather than being clamped to it.



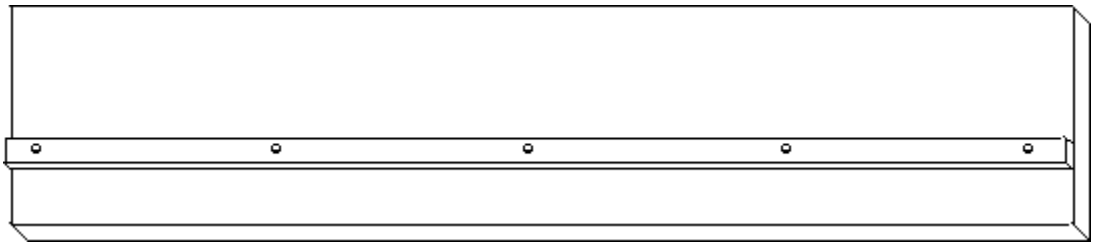
To use as straight edge

Clamp the board into the jig using appropriate holes for clamp strips, set fence on saw to a distance that will make a clean cut through entire width of board. For boards longer than 36" make a base the length of the board.



Miter Slot Option

For a more precise jig fasten a strip of flat iron that fits in miter slot on bottom of base with countersunk wood screws, this works especially well for cutting tapers.



Make your own wooden knobs

Toggle Clamps

Once attached to a bench or fixture, these become a quick action hold down clamp for jigs or keeping a work piece stationary.

Toggle Clamps

Rockler is now offering a ready built similar jig.

Taper / Straight Line Jig

If you ve ever struggled to make a lengthy angled cut, this is the jig for you. With a simple indexed angle setting system, heavy duty hold-down clamps and a smooth sliding design, it makes tapered cuts fast, easy and precise. Perfect for chair legs, table legs and more. Plus, with the miter bar removed it doubles as a stable straight line ripping jig. Includes 36" miter bar. Measures 31-5/8'' x 7-3/4''. 1/2'' thick MDF.

Taper / Straight Line Jig